

# DP564

## MULTICHANNEL AUDIO DECODER

Critical monitoring is essential to ensure that the highest quality audio reaches your listeners at home. The DP564 Multichannel Audio Decoder is the perfect monitoring tool for quality-control applications in DTV broadcast, postproduction, and DVD authoring.

The DP564 enables decoding and monitoring of programs with Dolby® Digital, Dolby Surround Pro Logic®, or regular PCM soundtracks, as well as Dolby Digital Surround EX™ and Pro Logic II decoding, making it the ideal digital reference decoder for both Dolby Digital and Dolby Surround.

The DP564 allows easy selection and monitoring of Dolby Digital's unique downmixing capabilities, listening modes, and compression modes. This means content producers and providers can verify how material originally produced and transmitted in 5.1 will sound in Dolby Surround, two-channel stereo, or mono.

The DP564 offers comprehensive monitoring functions for setup and control of monitoring environments: front-panel master volume, channel mutes, reference monitoring level, individual channel trims, center and surround channel delays, bass management control, and both full and band-limited pink noise. The headphone output has a

dedicated volume control and Dolby Headphone processing for surround sound monitoring over standard headphones, providing accurate QC monitoring with lower listener fatigue.

The front panel allows easy selection of the DP564 inputs: two AES3, a Toslink optical, and an Ethernet port for RTP streaming Dolby Digital audio. The front panel also incorporates a large vacuum fluorescent display (VFD), providing an intuitive user interface and clear graphic status menus for all Dolby Digital metadata settings, dynamic range control data, and output level metering.

The rear panel hosts both digital and analog main audio outputs. A linear timecode (LTC) output allows DVD facilities to check A/V sync between audio encoded into Dolby Digital and uncompressed video. Front- and rear-panel serial interfaces and an Ethernet port enable remote PC control and software updates. Remote control is also possible from an optional hardware controller (Dolby Cat. No. 549) or any external source using the GPI/O port.

For encoding Dolby Digital material for DVD and DTV applications, the Dolby DP569 Multichannel Dolby Digital Encoder is the ideal companion to the DP564.



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# DP564

## MULTICHANNEL AUDIO DECODER

### DP564 Specifications

#### Audio Coding Algorithms

Dolby Digital, Dolby Surround Pro Logic, Dolby Digital Surround EX, Dolby Surround Pro Logic II, Dolby Headphone

#### Audio Input Sampling Rates

32, 44.1, 48, 88.2, or 96 kHz

#### Audio Output Sampling Rates

32, 44.1, or 48 kHz

#### Frequency Response

Digital Outputs: 20 Hz to 20 kHz,  $\pm 0.01$  dB  
Analog Outputs: 20 Hz to 20 kHz,  $\pm 0.5$  dB

#### Distortion

<0.02%, 20 Hz to 10 kHz

#### Dynamic Range

>106 dB

#### Trim Level Adjust

+6 to -20 dB in 0.125 dB steps

#### Crosstalk

<100 dB at 1 kHz

#### Digital Audio Inputs

Two BNC female connectors, unbalanced, 75 $\Omega$  per AES-3ID-1995 (SMPTE 276M)  
Fiber optic via Toslink connector  
Formats supported: Dolby Digital (AC-3) in IEC 61937 format as specified in ATSC A/52 Annex B; PCM in AES3 format

#### AES Reference Input

BNC female with loop-through, unbalanced, 75 $\Omega$ , signal levels per AES3-ID

#### Digital Audio Outputs

Four BNC female connectors, unbalanced, 75 $\Omega$  per AES-3ID-1995 (SMPTE 276M)

#### Analog Audio Outputs

0 dBFS = +24 dBu; balanced floating; eight 3-pin male XLR connectors, 24-bit DAC

#### Headphone Output

+7 dBu maximum output into 50 $\Omega$  nominal; 1/4-inch standard stereo headphone jack; level adjustable

#### Linear Timecode Output

One SMPTE 12M-1995, BNC female, unbalanced, nominal output signal 1 V<sub>p-p</sub>, output impedance 50 $\Omega$

#### Serial Remote Control Input/Output

Front: RS-232, 8-pin female mini-DIN

Rear: RS-485, 9-pin female D-connector (SMPTE 207M)

#### General Purpose Input/Output (GPIO) Port

37-pin female D-connector, TTL compatible, may be configured to be level or edge sensitive using either polarity

#### Ethernet Port

10/100 Base-T with auto-detection; RJ-45 female connector

#### Front-Panel Display

128  $\times$  64 pixel vacuum fluorescent display (VFD)

#### Volume Controls

One large master volume control knob  
One small headphone volume control knob

#### Downmix Modes

Lt/Rt, Stereo, Mono

#### Listening Modes

Full, 3 Stereo, Phantom

#### Compression Modes

Custom, Line, RF; Custom mode has adjustable parameters

#### Test Noise

Auto: Sequences wideband or band-limited pink noise through enabled channels at two-second intervals  
Manual: Feeds continuous noise to selected channel when unit is in trim level mode

#### Power Requirements

90–264 VAC, 50–60 Hz, auto-sensing, 40 W maximum; unit designed to operate from a centrally switched power source

#### Dimensions and Weight

2-U rack-mount: 88  $\times$  483  $\times$  376 mm  
(3.5  $\times$  19  $\times$  14.8 inches)  
Net: 4 kg (8.5 lb)

#### Environmental Conditions

Operating: 0° to 50° C (32° to 122° F), natural convection cooling, 0–98% relative humidity (non-condensing)  
Non-operating: -20° to +70° C (-4° to +158° F)

#### Regulatory Notices

North America: This unit complies with the limits for a Class A digital device, pursuant to Part 15 of the FCC rules and Industry Canada ICES-003 Class A requirements, and is UL listed for both US and Canada.

Europe: This unit complies with the requirements of Low Voltage Directive 73/23/EEC and EMC Directive 89/336/EEC and carries the CE marking accordingly.

#### Warranty

One-year limited, parts and labor; see disclaimer below.

Specifications subject to change without notice.

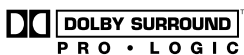
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DP564 Rear Panel

#### TECHNOLOGIES SUPPORTED



#### DISCLAIMER OF WARRANTIES:

Equipment manufactured by Dolby Laboratories is warranted against defects in materials and workmanship for a period of one year from the date of purchase. There are no other express or implied warranties and no warranty of merchantability or fitness for a particular purpose.

#### LIMITATION OF LIABILITY:

It is understood and agreed that Dolby Laboratories' liability whether in contract, in tort, under any warranty, in negligence, or otherwise shall not exceed the cost of repair or replacement of the defective components and under no circumstances shall Dolby Laboratories be liable for incidental, special, direct, indirect, or consequential damages (including but not limited to damage to software or recorded audio or visual material), or loss of use, revenue, or profit even if Dolby Laboratories or its agents have been advised, orally or in writing, of the possibility of such damages.